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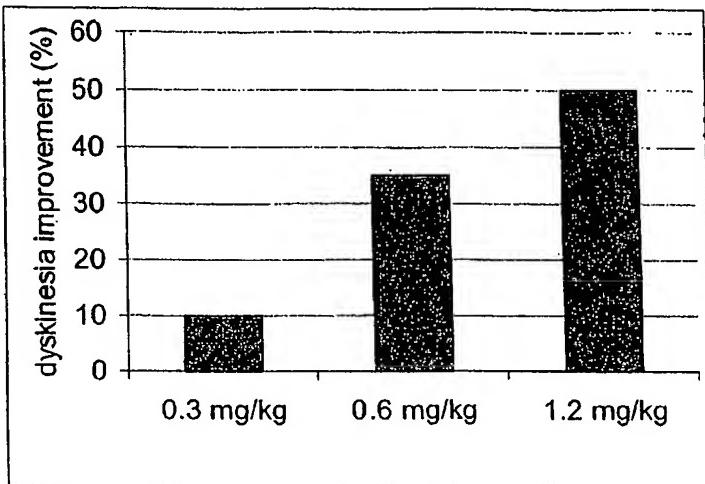
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(54) Title: SELECTIVE SEROTONIN 2A/2C RECEPTOR INVERSE AGONISTS AS THERAPEUTICS FOR NEURODEGENERATIVE DISEASES

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(57) Abstract: Behavioral pharmacological data with the compound of formula (I), a novel and selective 5HT2A/2C receptor inverse agonist, demonstrate *in vivo* efficacy in models of psychosis and dyskinésias. This includes activity in reversing MK-801 induced locomotor behaviors, suggesting that this compound may be an efficacious anti-psychotic, and activity in an MPTP primate model of dyskinésias, suggesting efficacy as an anti-dyskinésia agent. These data support the hypothesis that 5HT2A/2C receptor inverse agonism may confer antipsychotic and anti-dyskinetic efficacy in humans, and indicate a use of the compound of formula (I) and related agents as novel therapeutics for Parkinson's Disease, related human neurodegenerative diseases, and psychosis.



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**INTERNATIONAL SEARCH REPORT**

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A. CLASSIFICATION OF SUBJECT MATTER					
IPC 7	C07D211/06	A61K31/4468	A61P25/14	A61P25/16	A61P25/18
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According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61K C07D A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 877 173 A (FARBER NURI B ET AL) 2 March 1999 (1999-03-02) claims 1,30 -----	9-13
X	US 3 983 234 A (SAYERS ANTHONY CAMPBELL) 28 September 1976 (1976-09-28) column 1, line 1 - line 17 -----	9-13, 17-20
X	FRIEDMAN J H: "Clozapine treatment of psychosis in patients with tardive dystonia: report of three cases" MOVEMENT DISORDERS OFFICIAL JOURNAL OF THE MOVEMENT DISORDER SOCIETY, vol. 9, no. 3, 1 May 1994 (1994-05-01), pages 321-324, XP009032726 page 321, right-hand column, paragraph 3 page 323, right-hand column, paragraph 3 ----- -/-	25-28

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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International Application No  
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>YOSHIDA K ET AL: "Marked improvement of tardive dystonia after replacing haloperidol with risperidone in a schizophrenic patient"          CLINICAL NEUROPHARMACOLOGY,          vol. 21, no. 1, 1998, pages 68-69,          XP009032725          page 69, left-hand column - right-hand column</p> <p>-----</p>	25-28
X	<p>DECLELUSE F ET AL: "A case of tardive tremor successfully treated with clozapine"          MOVEMENT DISORDERS OFFICIAL JOURNAL OF THE MOVEMENT DISORDER SOCIETY,          vol. 13, no. 5, September 1998 (1998-09),          pages 846-847, XP009032724          the whole document</p> <p>-----</p>	25-28
X	<p>FACTOR S A ET AL: "Clozapine prevents recurrence of psychosis in Parkinson's disease"          MOVEMENT DISORDERS OFFICIAL JOURNAL OF THE MOVEMENT DISORDER SOCIETY,          vol. 7, no. 2, 1992, pages 125-131,          XP009032679          page 130, right-hand column, paragraph 2</p> <p>-----</p>	32-35, 39
X	<p>FACTOR ET AL: "Clozapine for the treatment of drug-induced psychosis in Parkinson's disease: results of the 12 week open label extension in the PSYCLOPS trial"          MOVEMENT DISORDERS OFFICIAL JOURNAL OF THE MOVEMENT DISORDER SOCIETY,          vol. 16, no. 1, January 2001 (2001-01),          pages 135-139, XP009032680          page 138, right-hand column, paragraph 2</p> <p>-----</p>	32-35, 39
X	<p>US 2002/165225 A1 (KANKAN RAJENDRA N ET AL) 7 November 2002 (2002-11-07)          page 1, right-hand column, paragraph 8 -          page 2, left-hand column, paragraph 1          claims 12,16</p> <p>-----</p>	32-35, 39-44, 46
X	<p>US 6 358 698 B1 (BRANN MARK R ET AL) 19 March 2002 (2002-03-19)          claims 9,10          column 1, paragraph 1          column 4, line 60 - line 64          column 5, line 59 - column 6, line 14          tables 2,3</p> <p>-----</p>	32-35, 39-44, 46
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International Application No  
PCT/US2004/001234

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	HERRICK-DAVIS ET AL: "Inverse Agonist Activity of Atypical Antipsychotic Drugs at Human 5-Hydroxytryptamine2C Receptors" THE JOURNAL OF PHARMACOLOGY AND EXPERIMENTAL THERAPEUTICS, vol. 295, no. 1, October 2000 (2000-10), pages 226-295, XP001182089 figures 1-3 table 1 -----	1-86

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Information on patent family members

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